OJCS-767-75

8 April 1975

STAT   MEMORANDUM FOR: [   ]-
                              ADP Systems Coordinator
                              Office of Communications

              SUBJECT   : Segmentation of the OC Personnel
                             Data Base (COMCON)

              REFERENCE   : Form 930, Computer Services Request/Action
                             Form, DTD 30 Jan 1975; Memo, OJCS-1824-74,
                             Title: "Partitioned Access to O/C
                             Personnel Data Base", DTD 9 Dec 1974.

     1. This memorandum is intended to clarify the task of
partitioning the O/C COMCON Data Base. As stated in OJCS-1824-
74, the additional development costs (manpower and computer)
would total approximately $7500, and would take 4-6 weeks of
programming time. As previously stated, the request for a
partitioning of the COMCON Data Base in accordance with the
specifications outlined can be accomplished, but the
following actions are necessary:

          a. A complete system redesign of the COMCON Data
              lists and of the I/O procedures. The seg-
              mentation called for requires file redefinition
              and re-coding of the related GIMS I/O procedures
              responsible for update and file maintenance.

          b. Rewriting of the True/Pseudo, Manning Table
              and Strength-Report report programs, since
              multiple extracts must be made against the
              data files in order to consolidate the data
              relating to all O/C personnel.

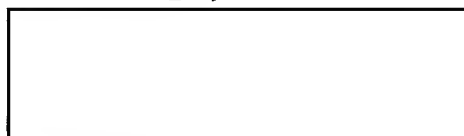   c. Retraining of O/C users in the system.

     2. Critical in any partitioning scheme is the new mode
of operation of the system. The concept of partitioning
files so that only predesignated user can have access (for
update and/or retrieval) can be supported in this system,
once effected. Each data file, if partitioned, is reserved

exclusively to the use of the designated user(s). Since the COMCON data structure is heavily dependent upon accessing information from other files within COMCON (e.g. cross/index between PERSOC and MANTABLE), the appropriate linkages between partitions within the COMCON files must be defined. If reports are to be produced by this system, then initiation of a request for a report (e.g. list, extract) can only be accomplished at the lowest level, to wit: the individual segment.

3. Additional system maintenance would be necessary during update. The necessary edits would have to be present to insure that records pertaining to individuals are located in the proper segment, and that no duplication of an individual's and/or related position data occurs. Any movement of individuals or positions from one segment to another would have to be verified from PERSIGN/Staffing. As an example, a change of an individual's SD (Service Designator) from MCT to MCN would have to be posted on the PERSIGN Data Base in order for OC-S/AD to move the individual from segment "T" to segment "N". Since posting of the PERSIGN Data Base usually is made within 2-3 weeks after the submittal of a request from personnel action form, a timing problem results. O/C does not maintain posting of an individuals service designation.

4. OC-S/AS could never consolidate data for an office-wide report (or for a report involving more than one segment) in one pass (search) at the data base; multiple passes would have to be done, each time specifying the particular segment to be extracted (or listed). Access to specific records would necessitate knowing what particular segment to access. Confusion as to if/where individuals/slots are present in the data base would be bound to result. But in the main, separate report extracts would be necessary at the office-wide level.

5. Since value-dependent security is not generally acceptable as offering a remedy to file partitioning (implementation of which would greatly slow down processing), the partitioning scheme would necessitate segmenting COMCON files, the result being an increase in processing time, and in all cases, redefinition of reports. Security would be provided in the partitioning scheme, but the mode of operation of the system may show the system to be unworkable.

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